IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appellant: Jerry Rolia et al. Examiner: Meng Yao Zhe

Serial No.: 10/698,769 Group Art Unit: 2195

Filed: October 31, 2003 Docket No.: 200300266-1

Title: METHOD AND SYSTEM FOR GOVERNING ACCESS TO COMPUTING

UTILITIES

APPEAL BRIEF UNDER 37 C.F.R. §41.37

Mail Stop Appeal Brief - Patents

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

This Appeal Brief is submitted in support of the Notice of Appeal filed on July 21, 2010, appealing the final rejection of claims 1-27 of the above-identified application as set forth in the Final Office Action mailed May 21, 2010.

The U.S. Patent and Trademark Office is hereby authorized to charge Deposit Account No. 08-2025 in the amount of \$540.00 for filing a Brief in Support of an Appeal as set forth under 37 C.F.R. §41.20(b)(2). At any time during the pendency of this application, please charge any required fees or credit any overpayment to Deposit Account No. 08-2025.

Appellant respectfully requests consideration and reversal of the Examiner's rejection of pending claims 1-27.

Appeal Brief to the Board of Patent Appeals and Interferences Appellant: Jerry Rolia et al. Serial No.: 10/698,769

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REAL PARTY IN INTEREST

The real party in interest is Hewlett-Packard Development Company, LP having a principal place of business at 11445 Compaq Center Drive West, Houston, TX 77070, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware corporation, headquartered in Palo Alto, CA. The general or managing partner of HPDC is HPQ Holdings, LLC.

RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences known to Appellant that will have a bearing on the Board's decision in the present Appeal.

STATUS OF CLAIMS

In a Final Office Action mailed May 21, 2010, claims 1-27 were finally rejected. No claims were objected to. Claims 1-27 are pending in the application. No claims were cancelled, allowed, or withdrawn. Claims 1-27 are the subject of the present Appeal.

STATUS OF AMENDMENTS

No amendments have been entered subsequent to the Final Office Action mailed May 21, 2010.

SUMMARY OF THE CLAIMED SUBJECT MATTER

The Summary is set forth as exemplary embodiments corresponding to the language of independent claims 1, 14, and 27. Discussions about elements of claims 1, 14, and 27 can be found at least at the cited locations in the specification and drawings.

Independent claim 1 recites a method (Figure 4 and specification, page 13, paragraphs 0035-0040) of governing access to resources in a computing utility facility (items 110, 122, 124, and 126 in Figure 1 and specification, page 6, paragraphs 0014-0018). The method comprising providing a processor (item 306 in Figure 3 and specification, page 9, paragraph 0024) for receiving a demand profile associated with an application that identifies the resources required from a pool of resources in the computing utility facility during one or more demand cycles (items 108, 110, 122, 124, and 126 in Figure 1 and specification, page

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6, paragraphs 0014-0017); admitting an application to the computing utility facility if resources required for the application can be provided from the pool of resources in accordance with the demand profile and associated one or more demand cycles (*item 318 in Figure 3 and specification, page 10, paragraph 0027*); and assigning available resources from the pool of resources in response to a request from the applications admitted to the computing utility facility (*item 328 in Figure 3 and specification, page 12, paragraph 0032*); wherein admitting the application further comprises unfolding the one or more demand cycles from the demand profile associated with the application into time slots requiring resources from the pool of resources (*item 502 in Figure 5 and specification, page 15, paragraph 0041*), and wherein the amount of resources required from the pool of resources by the application varies across each of the time slots such that assignment of resources is tailored to varying demand across each of the time slots (*item 502 in Figure 5 and specification, page 15, paragraph 0041*).

Independent claim 14 recites an apparatus for governing access to resources in a computing utility facility (items 110, 122, 124, and 126 in Figure 1 and specification, page 6, paragraphs 0014-0018). The apparatus comprising a processor capable of executing instructions (item 306 in Figure 3 and specification, page 9, paragraph 0024); a memory containing instructions when executed cause the processor to receive a demand profile associated with an application that identifies the resources required from a pool of resources in the computing utility facility during one or more demand cycles (items 108, 110, 122, 124, and 126 in Figure 1, item 302 in Figure 3, and specification, page 6, paragraphs 0014-0017, and page 10, paragraph 0025), admit an application to the computing utility facility if resources required for the application can be provided from the pool of resources in accordance with the demand profile and associated one or more demand cycles (item 318 in Figure 3 and specification, page 10, paragraph 0027); and assign available resources from the pool of resources in response to a request from the applications admitted to the computing utility facility (item 328 in Figure 3 and specification, page 12, paragraph 0032); and wherein the demand profile associated with an application is created through data collection or statistical estimation (item 330 in Figure 3 and specification, page 12, paragraph 0033); wherein the instructions that admit the application further comprises instructions that unfold the one or more demand cycles from the demand profile associated with the application into

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time slots requiring resources from the pool of resources (*item 502 in Figure 5 and specification, page 15, paragraph 0041*); and wherein the resources required from the pool of resources varies across each of the time slots such that assignment of resources is tailored to varying demand across each of the time slots (*item 502 in Figure 5 and specification, page 15, paragraph 0041*).

Independent claim 27 recites an apparatus for governing access to resources in a computing utility facility (items 110, 122, 124, and 126 in Figure 1 and specification, page 6, paragraphs 0014-0018). The apparatus comprising processor means for receiving a demand profile associated with an application that identifies the resources required from a pool of resources in the computing utility facility during one or more demand cycles (items 108, 110, 122, 124, and 126 in Figure 1, item 306 in Figure 3, and specification, page 6, paragraphs 0014-0017, and page 9, paragraph 0024); processor means for admitting an application to the computing utility facility if resources required for the application can be provided from the pool of resources in accordance with the demand profile and associated one or more demand cycles (item 318 in Figure 3 and specification, page 10, paragraph 0027); processor means for assigning available resources from the pool of resources in response to a request from the applications admitted to the computing utility facility (item 328 in Figure 3 and specification, page 12, paragraph 0032); and means for unfolding the one or more demand cycles from the demand profile associated with the application into time slots requiring resources from the pool of resources (item 502 in Figure 5 and specification, page 15, paragraph 0041); and means for tailoring the assignment of resources from the pool of resources to meet varying demand for resources by the application across each of the time slots (item 502 in Figure 5 and specification, page 15, paragraph 0041).

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GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

- I. Claims 1-2, 5-6, 8-15, 18-19, and 21-27 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the Clohessy et al. U.S. Patent No. 7,334,228 in view of the Brelin U.S. Patent No. 6,647,448 further in view of the O'Conner et al. U.S. Patent Application Publication No. 2003/0056126.
- II. Claims 3-4 and 16-17 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the Clohessy et al. U.S. Patent No. 7,334,228 in view of the Brelin U.S. Patent No. 6,647,448 further in view of the O'Conner et al. U.S. Patent Application Publication No. 2003/0056126 further in view of the Funke et al. U.S. Patent No. 5,845,201.
- III. Claims 7 and 20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the Clohessy et al. U.S. Patent No. 7,334,228 in view of the Brelin U.S. Patent No. 6,647,448 further in view of the O'Conner et al. U.S. Patent Application Publication No. 2003/0056126 further in view of the Contestabile U.S. Patent No. 7,123,141.

ARGUMENT

I. The Applicable Law

With regard to a 35 U.S.C. § 103 obviousness rejection: "Patent examiners carry the responsibility of making sure that the standard of patentability enunciated by the Supreme Court and by the Congress is applied in <u>each and every case</u>." M.P.E.P. 2141 (emphasis in the original). The Examiner bears the burden under 35 U.S.C. § 103 in establishing a *prima facie* case of obviousness. *In re Fine*, 837 F.2d 1071, 1074 [5 USPQ2d 1596, 1598] (Fed. Cir. 1988).

One criteria that must be satisfied to establish a *prima facie* case of obviousness is the reference or combined references must teach or suggest all of the claim limitations. *In re Royka*, 490 F.2d 981 [180 USPQ 580] (C.C.P.A. 1974).

However, "[a] patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art." *KSR Int'l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1731 [82 USPQ2d 1385, 1389] (2007). In making an

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obviousness determination over a combination of prior art references, it is "important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does." *Id. at* 1738 [1396].

In order to facilitate review of the determination of whether there was an apparent reason to combine known elements in the fashion claimed by the patent at issue, the "analysis should be made explicit." *Id. at* 1738 [1396]. "[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *In re Kahn*, 441 F.3d 977, 988 [78 USPQ2d 1329] (Fed. Cir. 2006) (cited with approval in *KSR*, 127 S. Ct. at 1738 [82 USPQ2d at 1396])

The test for obviousness under § 103 must take into consideration the claim as a whole; that is, one must consider the particular problem solved by the combination of elements recited in the claim. *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1143 [227 USPQ 543, 551] (Fed. Cir. 1985). At the same time, a prior patent cited as a § 103 reference must be considered in its entirety, "*i.e.* as a *whole*, including portions that lead away from the invention." *Id.* That is, the Examiner must recognize and consider not only the similarities, but also the <u>critical differences between the claim and the prior art</u> as one of the factual inquiries pertinent to any obviousness inquiry under 35 U.S.C. § 103. *In re Bond*, 910 F.2d 831, 834 [15 USPQ2d 1566, 1568] (Fed. Cir. 1990) (emphasis added).

Furthermore, the Examiner must avoid hindsight. *Id.* "A fact finder should be aware, of course, of the distortion caused by hindsight bias and must be cautious of arguments reliant upon *ex post* reasoning." *KSR*, 127 S. Ct. at 1739 [82 USPQ2d at 1397] (citing to *Graham v. John Deere*, 383 U.S. 1 [148 USPQ 459] (1966) in warning against a temptation to read into the prior art the teachings of the invention at issue and instructing courts to guard against slipping into the use of hindsight).

"[W]hen the prior art teaches away from combining certain known elements, discovery of a successful means of combining them is more likely to be nonobvious." *KSR*, 127 S. Ct. at 1737 [82 USPQ2d at 1395] (citing to *United States v. Adams*, 383 U.S. 39, 51-52 [148 USPQ 479] (1966).

In conclusion, an Appellant is entitled to a patent grant if a *prima facie* case of obviousness is not established. The Federal Circuit has endorsed this view in stating: "If

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examination at the initial stage does not produce a *prima facie* case of unpatentability, then without more the Appellant is entitled to grant of the patent." In re Oetiker, 977 F.2d 1443, 1446 [24 USPQ2d 1443, 1448] (Fed. Cir. 1992).

II. The rejection of claims 1-2, 5-6, 8-13, 14¹, 15, 18-19, and 21-27 under 35 U.S.C. §103(a) as being unpatentable over the Clohessy et al. U.S. Patent No. 7,334,228 in view of the Brelin U.S. Patent No. 6,647,448 further in view of the O'Conner et al. U.S. Patent Application Publication No. 2003/0056126 should be reversed.

The Examiner rejected claims 1-2, 5-6, 8-15, 18-19, and 21-27 under 35 U.S.C. § 103(a) as being unpatentable over the Clohessy et al. U.S. Patent No. 7,334,228 in view of the Brelin U.S. Patent No. 6,647,448 further in view of O'Conner et a. U.S. Publication 2003/0056126.

The combination of the Clohessy et al., Brelin, and O'Conner references do not teach or suggest all of the elements recited in each of the claims. Claim 1 recites a method of governing access to resources in a computing utility facility. The method provides a processor for receiving a demand profile associated with an application that *identifies the resources required* from a pool of resources in *the computing utility facility* during one or more demand cycles. The method *admits an application* to the *computing utility facility* if resources required for the application can be provided from the pool of resources in accordance with the demand profile and associated one or more demand cycles. The method assigns available resources from the pool of resources in response to a request from the applications admitted to the computing utility facility. Admitting the application further includes unfolding the one or more demand cycles from the demand profile associated with the application *into time slots requiring resources from the pool of resources*. The amount of resources required from the pool of resources by the application *varies across each of the time slots* such that *assignment of resources is tailored to varying demand across each of the time slots*. This is not taught or suggested in the art of record.

On page 2 of the Office Action of May 21, 2010, the Examiner cites the Clohessy reference as teaching indentifying the resources required from a pool of resources in the computing utility facility and admitting an application thereto. By way of example, and

¹ The Examiner did not include claim 14 in the rejections listed on page 2, but a rejection is listed on page 5.

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without limiting the scope of the claims, the specification of the present application describes that a pool of resources in a computing utility facility includes multiple different devices:

Resource pools 114, 116 and 118 include a range of resources including resource 122 to resource 124, resource 126 to resource 128 and resource 130 to resource 132 respectively. Each range of resources may include one or more different resources arranged in different organizational schemes as appropriate for the particular customers/applications being served and as required logistically by the system setup. For example, resources can be pooled according to the type of resource (i.e., pools of storage devices, pools of processors, pools of graphics rendering processors or pools of network nodes), the quality of the resources, (i.e., pools of high-availability devices and pools of medium reliability devices or low-cost devices) or any other logical method of grouping the resources. Specification page 6, lines 14-23.

In contrast, the Clohessy reference simply teaches a resource management strategy for a *single, personal portable device* (*see*, Abstract). As such, the Clohessy reference neither teaches nor suggests anything about a pool of resources in a computing utility facility, much less identifying them or admitting an application thereto. Accordingly, there is no teaching or suggestion in the Clohessy reference or art of record that *identifies the resources required* from a pool of resources in *the computing utility facility* during one or more demand cycles nor is there teaching or suggestion that *admits an application* to the *computing utility facility* if resources required for the application can be provided from the pool of resources in accordance with the demand profile and associated one or more demand cycles. Consequently, since these are features of all the independent claims 1, 14 and 27, these claims are allowable over the art of record and the rejection should be reversed.

On page 3 of the Office Action of May 21, 2010, the Examiner admits that the Clohessy reference fails to teach or suggest unfolding the one or more demand cycles from the demand profile associated with the application *into time slots requiring resources from the pool of resources* and fails to teach or suggest that the amount of resources required from the pool of resources by the application *varies across each of the time slots such that assignment of resources is tailored to varying demand across each of the time slots*.

The Examiner then asserts that the Brelin reference teaches the first of these features (i.e., the unfolding one or more demand cycles from the demand profile associated with the application into time slots requiring resources from the pool of resources), but acknowledges that Brelin fails to specifically teach the second (i.e., such that assignment of resources is

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tailored to varying demand across each of the time slots). The Examiner nonetheless indicates this second feature is obvious. Whether or not the Brelin reference teaches the first feature (and Applicant does not concede that it does), the Brelin reference certainly fails to teach or suggest this second claimed feature.

The Brelin reference merely teaches generating and storing resource schedule entries to an AV/C resource schedule bulletin board. The reference teaches scheduling audio/video equipment for particular periods of time during which these "resources" are not available for other requests (see, e.g., column 7, lines 49-52). The scheduling of multiple requests for single "resources," such as VCRs or the like, is not equivalent to assigning resources in a manner that is tailored to varying demand across each of the time slots, as recited in independent claim 1. Either Brelin's audio/video equipment is being used, or it is not being used, over any number of time slots. There is no assigning of resources in a manner that is tailored to varying demand for any of Brelin's "resources" over a particular number of time slots, because Brelin's resources only can be used to satisfy one request at any given time slot. This feature of the claims is not taught or suggested in the Brelin reference. Therefore, Applicant respectfully requests reconsideration and withdrawal of the 35 U.S.C. § 103(a) rejection to the claims, and requests allowance of these claims.

Finally, on page 4 of the Office Action of May 21, 2010, the Examiner asserts that the O'Conner reference teaches that "resource demands will vary across each time slot"

The O'Conner reference, however, has nothing to do with the amount of resources required from a pool of resources; it teaches power demand variance and control. Again, the claim feature is that the *amount of resources required from the pool of resources* by the application *varies across each of the time slots* such that *assignment of resources is tailored to varying demand across each of the time slots*. This feature is simple not taught or suggested in the O'Conner reference, which does not teach or suggest an application requiring resources from a pool of resources. Therefore, Applicant respectfully requests reconsideration and withdrawal of the 35 U.S.C. § 103(a) rejection to the claims, and requests allowance of these claims.

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III. The rejection of claims 3-4 and 16-17 under 35 U.S.C. §103(a) as being unpatentable over the Clohessy et al. U.S. Patent No. 7,334,228 in view of the Brelin U.S. Patent No. 6,647,448 further in view of the O'Conner et al. U.S. Patent Application Publication No. 2003/0056126 further in view of the Funke et al. U.S. Patent No. 5,845,201 should be reversed.

The Examiner rejected claims 3-4 and 16-17 under 35 U.S.C. § 103(a) as being unpatentable over the Clohessy et al. U.S. Patent No. 7,334,228 in view of the Brelin U.S. Patent No. 6,647,448 further in view of O'Conner et a. U.S. Publication 2003/0056126, further in view of the Funke et al. U.S. Patent No. 5,845,201. However, dependent claims 3-4 and 16-17, each includes the limitations described above with respect to independent claims 1 and 14. As such, for reasons similar to those described above with respect to the independent claims, Appellant respectfully submits that dependent claims 3-4 and 16-17 are also allowable over the art of record. Accordingly, Appellant respectfully requests reversal of the rejection of dependent claims 3-4 and 16-17 under 35 U.S.C. § 103(a).

IV. The rejection of claims 7 and 20 under 35 U.S.C. §103(a) as being unpatentable over the Clohessy et al. U.S. Patent No. 7,334,228 in view of the Brelin U.S. Patent No. 6,647,448 further in view of the O'Conner et al. U.S. Patent Application Publication No. 2003/0056126 further in view of the Contestabile U.S. Patent No. 7,123,141 should be reversed.

The Examiner rejected claims 7 and 20 under 35 U.S.C. § 103(a) as being unpatentable over the Clohessy et al. U.S. Patent No. 7,334,228 in view of the Brelin U.S. Patent No. 6,647,448 further in view of O'Conner et a. U.S. Publication 2003/0056126 further in view of the Contestabile U.S. Patent No. 7,123,141. However, dependent claims 7 and 20, each includes the limitations described above with respect to independent claims 1 and 14. As such, for reasons similar to those described above with respect to the independent claims, Appellant respectfully submits that dependent claims 7 and 20 are also allowable over the art of record. Accordingly, Appellant respectfully requests reversal of the rejection of dependent claims 7 and 20 under 35 U.S.C. § 103(a).

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CONCLUSION

For the above reasons, Appellant respectfully submits that the cited references neither anticipate nor render obvious claims of the pending Application. The pending claims distinguish over the cited references, and, therefore, Appellant respectfully requests that the Examiner be reversed and claims 1-27 be allowed.

Any inquiry regarding this Response should be directed to Paul P. Kempf at Telephone No. (612) 767-2502, Facsimile No. (612) 573-2005.

Respectfully submitted,

Jerry Rolia et al.,

By their attorneys,

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PPK:cmj:mlm Paul P. Kempf

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CLAIMS APPENDIX

1. (Previously Presented) A method of governing access to resources in a computing utility facility, comprising:

providing a processor for receiving a demand profile associated with an application that identifies the resources required from a pool of resources in the computing utility facility during one or more demand cycles;

admitting an application to the computing utility facility if resources required for the application can be provided from the pool of resources in accordance with the demand profile and associated one or more demand cycles; and

assigning available resources from the pool of resources in response to a request from the applications admitted to the computing utility facility;

wherein admitting the application further comprises unfolding the one or more demand cycles from the demand profile associated with the application into time slots requiring resources from the pool of resources, and

wherein the amount of resources required from the pool of resources by the application varies across each of the time slots such that assignment of resources is tailored to varying demand across each of the time slots.

2. (Previously Presented) The method of claim 1 wherein admitting the application further comprises:

comparing the time slots requiring resources with a staging calendar of time slots representing availability of resources in the pool of resources; and

converting time slots from the staging calendar to a permanent calendar when comparison indicates the time slots requiring resources from the demand profile are available for assignment.

3. (Original) The method of claim 2 wherein unfolding the one or more demand cycles includes a caveat time cycle based upon an event that occurs over a long-period of time and is selected from a set including special events, holidays, seasonal occurrences and emergencies.

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- 4. (Original) The method of claim 3 wherein the caveat time cycle is based upon knowing when at least one particular event is going to occur in the future.
- 5. (Original) The method of claim 2 wherein unfolding the one or more demand cycles includes a demand cycle describing a demand for resources from a resource pool during weekdays and another demand cycle describing another demand for resources during weekends.
- 6. (Original) The method of claim 2 wherein converting time slots from the staging calendar to a permanent calendar comprises:

copying the time slots from the staging calendar to the permanent calendar; and preallocating the requested resources from the pool of resources according to the permanent calendar schedule.

7. (Original) The method of claim 2 wherein converting time slots from the staging calendar to a permanent calendar comprises:

indicating the time slots in the staging calendar associated with the requested resources are permanent and not for staging purposes; and

pre-allocating the requested resources from the pool of resources according to the permanent calendar schedule.

- 8. (Original) The method of claim 1 further comprising: policing requests for resources from the admitted applications to determine if the resources being requested are within an acceptable range.
- (Original) The method of claim 8 further comprising: intercepting a request for resources from an application admitted to access a pool of resources;

determining if resource request is within an acceptable range of demands based upon the demand profile of the application;

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indicating an application is not entitled to the request when the determination indicates the request is outside the acceptable range of demands; and

indicating an application is entitled to the request when the determination indicates an application is within the acceptable range of demands.

- 10. (Original) The method of claim 1 further comprising arbitrating the allocation of limited resources between two or more applications entitled to receive the requested resources.
- 11. (Original) The method of claim 10 wherein the arbitration comprises:

detecting a conflict in providing requested resources to two or more admitted applications entitled to receive the requested resources;

determining if at least one application can forego receiving the requested resources causing the conflict for a predetermined period of time;

instructing the at least one application to forego receipt of the requested resources for a period of time in accordance with the determination;

allocating resources to the remaining admitted applications entitled to receive the requested resources in accordance with a priority scheme.

- 12. (Original) The method of claim 11 wherein the priority scheme includes selecting admitted applications to receive the requested resources on a first-come-first-serve basis.
- 13. (Original) The method of claim 11 wherein the priority scheme includes selecting admitted applications to receive the requested resources in according to economic and class of services factors.
- 14. (Previously Presented) An apparatus for governing access to resources in a computing utility facility, comprising:
 - a processor capable of executing instructions;
- a memory containing instructions when executed cause the processor to receive a demand profile associated with an application that identifies the resources required from a

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pool of resources in the computing utility facility during one or more demand cycles, admit an application to the computing utility facility if resources required for the application can be provided from the pool of resources in accordance with the demand profile and associated one or more demand cycles; and assign available resources from the pool of resources in response to a request from the applications admitted to the computing utility facility; and

wherein the demand profile associated with an application is created through data collection or statistical estimation;

wherein the instructions that admit the application further comprises instructions that unfold the one or more demand cycles from the demand profile associated with the application into time slots requiring resources from the pool of resources; and

wherein the resources required from the pool of resources varies across each of the time slots such that assignment of resources is tailored to varying demand across each of the time slots.

15. (Previously Presented) The apparatus of claim 14 wherein the instructions that admit the application further comprises instructions that:

compare the time slots requiring resources with a staging calendar of time slots representing availability of resources in the pool of resources and convert time slots from the staging calendar to a permanent calendar when comparison indicates the time slots requiring resources from the demand profile are available for assignment.

- 16. (Original) The apparatus of claim 15 wherein the instructions that unfold the one or more demand cycles also includes in the one or more demand cycles a caveat time cycle based upon an event that occurs over a long-period of time and is selected from a set including special events, holidays, seasonal occurrences and emergencies.
- 17. (Original) The apparatus of claim 16 wherein the caveat time cycle processed by the instructions is based upon knowing when at least one particular event is going to occur in the future.

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- 18. (Original) The apparatus of claim 15 wherein the instructions that unfold the one or more demand cycles includes a demand cycle describing a demand for resources from a resource pool during weekdays and another demand cycle describing another demand for resources during weekends.
- 19. (Original) The apparatus of claim 15 wherein the instructions that convert time slots from the staging calendar to a permanent calendar further comprises instructions that:

copy the time slots from the staging calendar to the permanent calendar and preallocate the requested resources from the pool of resources according to the permanent calendar schedule.

20. (Original) The apparatus of claim 15 wherein the instructions that convert time slots from the staging calendar to a permanent calendar further comprises instructions that:

indicate the time slots in the staging calendar associated with the requested resources are permanent and not for staging purposes and preallocate the requested resources from the pool of resources according to the permanent calendar schedule.

- 21. (Original) The apparatus of claim 14 further comprising instructions that: police requests for resources from the admitted applications to determine if the resources being requested are within an acceptable range.
- 22. (Original) The apparatus of claim 21 further comprising instructions that:

intercept a request for resources from an application admitted to access a pool of resources, determine if the resource request is within an acceptable range of demands based upon the demand profile provided by the application, indicate that an application is not entitled to the request when the determination indicates the request is outside the acceptable range of demands and indicate that an application is entitled to the request when the determination indicates an application is within the acceptable range of demands.

23. (Original) The apparatus of claim 14 further comprising instructions that:

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arbitrate an allocation of limited resources between two or more applications entitled to receive the requested resources.

24. (Original) The apparatus of claim 23 wherein the instructions that arbitrate further comprises instructions that:

detect a conflict in providing requested resources to two or more admitted applications entitled to receive the requested resources, determine if at least one application can forego receiving the requested resources causing the conflict for a predetermined period of time, instruct the at least one application to forego receipt of the requested resources for a period of time in accordance with the determination, and allocate the resources to the remaining admitted applications entitled to receive the requested resources in accordance with a priority scheme.

- 25. (Original) The apparatus of claim 24 wherein the instructions implementing the priority scheme further comprises instructions that select admitted applications to receive the requested resources on a first-come-first-serve basis.
- 26. (Original) The apparatus of claim 24 wherein the instructions implementing the priority scheme further comprises instructions that select admitted applications to receive the requested resources in according to economic and class of services factors.
- 27. (Previously Presented) An apparatus for governing access to resources in a computing utility facility, comprising:

processor means for receiving a demand profile associated with an application that identifies the resources required from a pool of resources in the computing utility facility during one or more demand cycles;

processor means for admitting an application to the computing utility facility if resources required for the application can be provided from the pool of resources in accordance with the demand profile and associated one or more demand cycles;

processor means for assigning available resources from the pool of resources in response to a request from the applications admitted to the computing utility facility; and

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means for unfolding the one or more demand cycles from the demand profile associated with the application into time slots requiring resources from the pool of resources; and

means for tailoring the assignment of resources from the pool of resources to meet varying demand for resources by the application across each of the time slots.

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EVIDENCE APPENDIX

None

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RELATED PROCEEDINGS APPENDIX

None